

Mucipoly Injection

Acetylcysteine (20% w/v) Injection

Description:

Acetylcysteine 20% w/v Injection is a potent mucolytic and antioxidant medication commonly used to treat conditions involving excessive mucus production and respiratory distress. It is particularly effective in managing acute acetaminophen (paracetamol) overdose, and it also helps in clearing mucus from the respiratory tract in cases of chronic respiratory diseases.

Composition:

Each 1 mL of solution contains:

- Acetylcysteine: 200 mg (20% w/v)
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Indications:

Acetylcysteine 20% w/v Injection is primarily used for:

1. Acetaminophen (Paracetamol) Overdose:
 - To prevent liver damage and support detoxification in patients who have ingested an overdose of paracetamol. It works by replenishing glutathione stores and promoting the detoxification of toxic metabolites.
2. Chronic Obstructive Pulmonary Disease (COPD):

- Helps in reducing mucus viscosity, making it easier to clear excess mucus from the airways.
3. Cystic Fibrosis and Chronic Bronchitis:
 - Used to improve airway function by thinning the mucus, thus facilitating easier breathing and reducing risk of infections.
 4. Acute Respiratory Distress Syndrome (ARDS):
 - Can be used as an adjunct therapy for improving pulmonary function in patients with ARDS or those requiring ventilator support.
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Mechanism of Action:

1. Mucolytic Action:
 - Acetylcysteine breaks down the chemical structure of mucus, reducing its viscosity and facilitating easier removal from the respiratory tract.
 2. Antioxidant Properties:
 - It replenishes glutathione levels, a potent antioxidant that helps neutralize harmful free radicals and protect against oxidative damage, particularly in cases of acetaminophen overdose.
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Dosage and Administration:

- Acetaminophen Overdose:
 - Initial Dose: 150 mg/kg body weight (IV) over 60 minutes.
 - Subsequent Dose: 50 mg/kg body weight (IV) over 4 hours, followed by 100 mg/kg body weight (IV) over the next 16 hours.

- Treatment duration may vary based on the severity of the overdose and liver function monitoring.
- **Mucolytic Therapy (for respiratory conditions):**
 - **Dose: 150 mg to 300 mg (IV) every 12 to 24 hours** depending on the severity of the condition and the patient's clinical response.
 - **Administration:** Administered via slow intravenous infusion or drip after dilution with an appropriate IV fluid.
- **Route of Administration:**
 - **Intravenous injection or infusion only. Do not administer as an intramuscular injection.**

Side Effects:

Some potential side effects may include:

- **Gastrointestinal issues:** such as nausea, vomiting, or diarrhea.
- **Allergic reactions:** including rash, fever, or itching.
- **Respiratory:** bronchospasm or wheezing in some patients, particularly those with asthma or respiratory conditions.
- **Hypotension:** Rare instances of low blood pressure during infusion.
- **Headache or dizziness** may occur occasionally.

Precautions:

1. **Pregnancy and Lactation:**
 - Use with caution during pregnancy, particularly in the first trimester. Consult a healthcare provider before use if you are pregnant or breastfeeding.
2. **Respiratory Conditions:**
 - Use with caution in patients with asthma or bronchospastic

conditions, as acetylcysteine can trigger bronchospasm in some individuals.

3. Liver Disease:

- Monitor liver function carefully when used for acetaminophen overdose, particularly in patients with pre-existing liver disease.

4. Hypersensitivity:

- A thorough history of allergies to acetylcysteine or sulfite-containing products is necessary, as this drug contains sulfites that may trigger allergic reactions in susceptible individuals.

Storage Instructions:

- Store at room temperature (15°C - 25°C) in a cool, dry place.
- Do not freeze the injection.
- Keep the vial tightly closed and out of the reach of children.
- Use the solution immediately after preparation.
- Do not use the solution if it appears discolored or contains particles.

Note: Acetylcysteine 20% w/v Injection should only be used under the supervision of a healthcare professional due to its potent effects and the need for appropriate dosing, especially in cases of acetaminophen overdose. Always follow medical advice carefully for optimal results and safety.

Manufactured in India for:

CafoliTM
L I F E C A R E

Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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